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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,875	06/25/2003	Masahito Honda	OHT-0018	2244

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EXAMINER

HANNON, CHRISTIAN A

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,875

Applicant(s)

HONDA, MASAHIRO

Examiner

Christian A. Hannon

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,9,10,12-14 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,7,9,20 and 21 is/are rejected.
- 7) ☒ Claim(s) 4, 5, and 10-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is response to applicant's response filed on 01/19/2006. Claims 1, 3-5, 7, 9, 10, 12-14, 16-21 are now pending in the present application. **This action is made final.**

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitation "all of the contact input portions" in line 3 of the claim . There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 7, 9 & 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Wingett et al (US 2002/0061735), herein Wingett.

Regarding claim 1, Wingett teaches a slide type multi directional input key comprising a key top (Figure 5, Items 22, 23 & 25; Wingett) which has an upper portion protruding from an insertion hole (Figure 5, Item 21; Wingett) extending through an exterior member (Figure 1, Item 2; Wingett) and a lower portion having a pushing member protruding downwardly therefrom (Figure 5, Item 24; Wingett) and which is capable of sliding in the direction of a hole inner surface of the insertion hole (Page 2, [0030]; Wingett) and a key sheet (Figure 5, Item 15, 20 & 27) formed of a rubber like resilient material (Page 2, [0029]; Wingett), the key sheet being adapted to support the key top so as to allow the key top to slide from the initial position in the direction of the hole inner surface of the insertion hole and in the return direction toward the initial position, the key sheet generating an elastic urging force whereby the key top returns automatically to the initial position (Page 2, [0032]; Wingett), wherein the key sheet is firmly attached to the key top and the exterior member (Figure 1, Items 2 & 7; Page 2, [0030]; Wingett). It is noted that Wingett's use of the verb 'tilt' and applicant's use of the verb 'slide' are being interpreted by the examiner to be analogous in this case since the functions in turn are analogous.

With regard to claim 3, Wingett teaches the limitations of claim 1, in addition wherein the key top is composed of upper (Figure 5, Item 23; Wingett) and lower (Figure 5, Item 25; Wingett) key top portions, between which the key sheet is sandwiched for firm attachment (Figure 5, Items 23, 15 & 25).

In regards to claim 7, Wingett teaches the limitations of claim 1, in addition to a central contact portion below the pushing member of the key top at an initial position thereof (Figure 5, Item 25; Wingett).

With respect to claim 9, Wingett teaches the limitations of claim 7, in addition to when the key top is at a slide position, the bottom surface of the pushing member is situated above the central contact portion (Figure 5, Item 25; Wingett) so that the pushing member can effect input through both the contact input portions and the central contact portion (Page 2, [0030]; Wingett). Wingett discloses a optional switch activated by stub item 24 of figure 5, since the key top pivots about the switch it reads on the claim.

Regarding claim 21, Wingett teaches a slide type multi directional input key comprising a key top (Figure 5, Items 22, 23 & 25; Wingett) which has an upper portion protruding from an insertion hole (Figure 5, Item 21; Wingett) extending through an exterior member (Figure 1, Item 2; Wingett) and a lower portion having a pushing member protruding downwardly therefrom (Figure 5, Item 24; Wingett) and which is capable of sliding in the direction of a hole inner surface of the insertion hole (Page 2, [0030]; Wingett), a plurality of contact input portions (Figure 4, Items 26 a-d; Wingett) adapted to effect input upon receiving pressure from the pushing member (Page 2, [0031]; Wingett), the pushing member being adapted to slide toward at least one of the contact input portions (Page 2, [0031]; Wingett) and a flexible film having an exposure hole, the pushing member being adapted to come into contact with the hole inner surface of the exposure hole (Figure 4, Items 15, 21; Wingett).

Allowable Subject Matter

5. Claims 4, 5, 10, 12-14, 16-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, Wingett teaches the input key of claim 1, however Wingett fails to teach wherein the key sheet includes an inclined portion spreading out from the portion firmly attached to the key top, and an arch-shaped curved portion formed by upwardly bending the inclined portion starting with its lower end portion, and wherein the wall thickness of an erect wall portion in the outer periphery of the curved portion is larger than the wall thickness of an erect wall portion on the inner periphery thereof and that of the inclined portion.

With regard to claim 5, Wingett teaches the input key of claim 1, however Wingett fails to teach wherein the exterior member has on a back surface thereof a stopper protrusion for stopping the sliding of the key top before the key top comes into contact with the insertion hole.

With regard to claim 10, Wingett teaches the input key of claim 1, however Wingett fails to teach wherein the exterior member is a ring-shaped outer-ring key top allowing multi directional input.

With regard to claim 14, Wingett teaches the input key of claim 1, however Wingett fails to teach wherein the plurality of contact input portions are formed by a membrane switch composed of a base film with a plurality of lower contact portions, a

flexible film with a plurality of upper contact portions corresponding to the lower contact portions, and a spacer film forming a predetermined gap between the base film and the flexible film.

Response to Arguments

6. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hsu et al (US 2003/0083021) disclose a keypad assembly.

Watanabe (US 6,094,191) disclose a keyboard and an information processing apparatus.

Bebie (US 4,536,625) disclose a keyboard design.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 2685

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

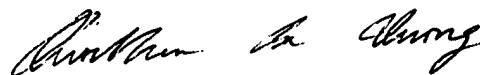
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian A. Hannon whose telephone number is (571) 272-7385. The examiner can normally be reached on Mon. - Fri. 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christian A. Hannon
March 6, 2006



QUOCHIEN B. VUONG
PRIMARY EXAMINER